

BUCEROS

ENVIS Centre on AVIAN ECOLOGY

Vol. 22, No. 3, 2017



ABOUT ENVIS

ENVIS (Environmental Information System) is a network of subject-specific centres located in various institutions throughout India. The focal point of the present 66 ENVIS centres in India is at the Ministry of Environment, Forest and Climate Change, New Delhi, which further serves as the Regional Service Centre (RSC) for INFOTERRA, the global information network of the United Nations Environment Programme (UNEP) to cater to environment information needs in the South Asian sub-region. The primary objective of all ENVIS centres is to collect, collate, store and disseminate environment related information to various user groups, including researchers, policy planners, and decision makers.

The ENVIS Centre at the Bombay Natural History Society was set up in June 1996 to serve as a source of information on Avian Ecology.

Objectives of the ENVIS Centre at BNHS

- ✍ To create a bibliographic database of published literature related to avian ecology study
- ✍ To publish and distribute BUCEROS newsletter on avian ecology to its members
- ✍ To create and upload databases on avian ecology on ENVIS website www.bnhsenvis.nic.in
- ✍ To reply to queries related to birds



BUCEROS

ENVIS Newsletter

Avian Ecology

Vol. 22, No. 3, 2017

ENVIS TEAM AT THE BNHS

Project Coordinator

Dr. Girish Jathar

Programme Officer

Sagar B. Satpute

Information Officer

Sushmita Karmakar

IT Officer

Heta N. Akolkar

Data Entry Operator

Kritalee D. Chindarkar

EDITORIAL TEAM

Vibhuti Dedhia

M.R. Maithreyi

Layout

V. Gopi Naidu

Cover

Black-winged Kite *Elanus caeruleus*
by Rahul Chakraborty

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Bombay Natural History Society,
Hornbill House, S.B. Singh Road,
Mumbai 400 001, Maharashtra, India.
Tel.: (91-22) 2282 1811
Fax: (91-22) 2283 7615
E-mail: bnhs@envis.nic.in
Website: www.bnhsenvis.nic.in

CONTENTS

ENVIS NEWS

World Wetlands Day Celebration 5

ORGANIZATIONAL NEWS

BNHS, Wetlands International hold a
Waterbird count 5

NATIONAL NEWS

Bengal a hub of soaring trade in
wild Indian birds 5

In a first, 300 Demoiselle cranes flock to
Ganga barrage in Bijnor 6

Pelican festival at Atapaka off
to a flying start 6

It's official: over 91,000 migratory birds visited
Khijadiya this winter 7

INTERNATIONAL NEWS

Worrying Alarm Call for
World's Birds on brink of Extinction 7

Study sheds light on little-known migration
habits of the Atlantic Puffin 8

ARTICLES

Killing for Living 9
Rahul Chakraborty

Shrikes: Avid Gluttons 12
Rahul Vanjari, Raghavendra Vanjari & Shivanand Hiremath

Life of an Osprey 15
Daksha Bapat

Dust bathing by Birds 17
Ajit Hota

EDITORIAL

Eye of the raptor

Birds first evolved from theropod dinosaurs during the Jurassic period (165–150 million years ago), these comprising primitive toothed birds. These primitive avifauna went on the path of extinction (along with dinosaurs) in the late Cretaceous period. A few groups survived, and by the close of the Cretaceous (145 million years ago), modern birds had started making their appearance. Among the modern birds, raptors evolved around 60 million years ago during the Cenozoic Era along with the diversification of mammalian life forms. In the absence of predatory dinosaurs, some raptorial birds occupied this vacant niche and became ‘flightless terrors’ for mammals. Popularly known as ‘Terror Birds’ these were possibly the first raptors of the modern world.

In this course of evolution, diurnal raptors developed an advantage over other bird groups; their eyes became relatively larger and provided them with a longer anterior focal length, large retinal image, and higher visual acuity. In addition, most of the predatory birds had two visual hot spots – fovea – at the back of their eye – humans have only one fovea. Fovea is, a tiny pit on the retina with a high density of photoreceptors. This feature gives them excellent vision and explains why raptors are so remarkable in locating prey.

Another group of birds that have this unique advantage in vision are the shrikes. James Harting, falconer and ornithologist, narrated an interesting story about shrikes in 1877. In Netherlands, falconers regularly used shrikes as decoys to trap migrating falcons. As a result of shrike’s extraordinary eyesight, they see the approaching falcons much earlier than humans. The agitated behaviour of the shrike would be an indicator for falconers of approaching raptors. Shrikes were therefore prized possessions for falconers.

This issue of Buceros has articles on these two raptorial bird groups that share some extraordinary evolutionary wonders. The story on rescue of an Osprey is equally fascinating and showcases human empathy towards other life forms.

We trust readers will like the stories and enjoy reading them.

Girish Jathar

World Wetlands Day Celebration

World Wetlands Day is celebrated annually on February 2nd. This year BNHS, and ENVIS Resource Partner on Avian Ecology, organized an event for college students to spread awareness on importance of Wetlands, Ramsar Sites and their conservation. The event was conducted at the BNHS-Conservation Education Centre (CEC) at Goregaon, Mumbai. The students and teachers of Shreemati Nathibai Damodar Thackersey (SNDT)

College, Churchgate, attended this event, which started with a short nature trail in the SGNP followed by a presentation on the “Importance of Wetland and Mangrove Ecosystem” by Mr. Sagar Satpute, Programme Officer, ENVIS. Mrs. Sailee Joshi-Gupte, Information Officer, ENVIS, conducted an essay competition on ‘Wetland and its Conversation’ and ‘Future of Wetlands in India’. ■

Organizational News

BNHS and Wetlands International hold a Waterbird count

PUNE: BNHS and Wetlands International held a waterbird census in and around wetlands and important bird and biodiversity areas (IBA) from January 6–21. Waterbirds are key indicators to understand the health of wetlands. Asian Waterbird Census (AWC), a pan-India initiative, is a citizen science programme supporting management and conservation of waterbirds and wetlands and is part of a global initiative – International Waterbird Census.

The AWC encourages people to count waterbirds in wetlands around them and collect information to promote the management of internationally important sites, such as Ramsar.

P. Sathiyaselvam, Assistant Director, BNHS Wetlands Programme, said “The AWC, primarily carried out by amateur and professional ornithologists, government, and non-governmental agencies has been successful in providing substantial information on status of wetlands and distribution of waterbirds. The data obtained will be valuable not only to conserve waterbird habitats at the national level, but also of wetlands under the Central Asian Flyway at international level.” ■

Source: <https://timesofindia.indiatimes.com/city/pune/bnhs-wetlands-intl-to-hold-crucial-15-day-waterbird-count-this-month/articleshowprint/62386653.cms>

National News

Bengal a hub of soaring trade in wild Indian birds

In mid-January, hundreds of wild birds with bright plumage flew out of iron cages in a burst of colours into the freedom of the sky. There were so many of them that it took several minutes before the cages were empty. The release followed the highest ever seizure of wild birds in West Bengal in the preceding week. The birds were set free in the forest of Nayagram in the Pashchim Medinipur district, where such a large population of birds could be sustained in wilderness.

The seizure included 1,782 Rose-ringed and Plum-headed parakeets, 80

Common Hill Myna and 892 munias stuffed in cages and being transported to a local fair in two vehicles, when they were intercepted by the forest officials. According to investigators, the birds were trapped along Uttar Pradesh and Nepal border. They were transported short distances by train to ensure that the maximum number could be kept alive. Forest officials intercepted them at West Bengal’s Bardhaman Station, based on a tip-off.

Experts observe that West Bengal, has for the past several years been a hub for trade in Indian wild birds, despite laws prohibiting it. After a

1991 amendment to the Indian Wildlife (Protection) Act, 1972, except for the House Crow *Corvus splendens*, which is listed as vermin, no Indian bird can be hunted, trapped, caged or traded.

Abrar Ahmed, ornithologist and former consultant to NGO Traffic International’s Bird Trade Project, said that his studies over the past two decades have shown that of the 1,300 Indian species of birds, about 450 are being traded in domestic and international markets.

Some of the most traded species are the Rose-ringed Parakeet *Psittacula krameri*, Plum-headed

Parakeet *Psittacula cyanocephala* and Alexandrine Parakeet *Psittacula eupatria*, followed by the passerines – Black-headed Munia *Lonchura malacca*, Red Munia *Amandava amandava*, White-throated Munia *Euodice malabarica*, and Hill Mynah *Gracula religiosa*.

Explaining how the bird trade racket is spread far and wide Mr. Ahmed referred to a recent seizure at Lucknow, where about 800 wild birds were seized in the first week of January and seven persons were arrested by the Uttar Pradesh Police.

He also pointed to another seizure in Nepal on October 23, 2017, where three Indian nationals and a Pakistani national were arrested with a large number of animals and birds. Kolkata is the end point for the trade.

A senior official of the West Bengal Forest Department, who has been involved in the seizure of thousands of birds and the arrest of over 100 persons for the crime, described it as an “unending problem” as long as there is demand for wild Indian birds in local markets.

While there are provisions in the

law to prosecute buyers of these birds, it has not been implemented and law-enforcers are of the opinion that prosecuting buyers would amount to taking the matter “a little too far”.

The researcher says there are at least 5,000 families, including traditional trappers such as Mishrikars, Pathamies, Bahelias or Chirimars, who depend on bird-catching as a means of livelihood. Conservationists fear that any attempt to stop the trade in Indian wild birds will not bear fruit in long run without the rehabilitation of these communities. ■

Source: <https://www.thehindu.com/news/national/other-states/bengal-a-hub-for-soaring-trade-in-wild-indian-birds/article22715812.ece>

In a first, 300 Demoiselle cranes flock to Ganga barrage in Bijnor

Birdwatchers had a pleasant surprise on Sunday when they spotted as many as 300 Demoiselle Cranes *Anthropoides virgo* at the Ganga barrage. These migratory birds, mainly found in central Eurasia, ranging from the Black Sea to Mongolia and North-Eastern China, come to various parts of India to spend the winter after crossing the Himalaya. However, these birds rarely come to the Ganga barrage in Bijnor. That is why the presence of the flock of Demoiselle Cranes in the area has created a flutter among forest authorities. They have started the task of identifying and recording the presence of these birds. Authorities say this is the time for these migratory birds

to return to their nesting grounds in Eurasia. It is believed that the birds may be on their way home. The Demoiselle Crane, called ‘koonj’ in local parlance, is slightly smaller than the Common Crane, but has similar plumage. It has a long white neck with a black stripe that extends from the foreneck down to its chest. With the onset of winter in November, migratory birds from colder regions of Eurasia fly to India to roost at different places where they stay till March. This winter, a large number of migratory birds flocked to Bijnor district. They could be spotted at various places, including along river Ganga, Peeli dam, Harevali lake, Sherkot and Afzalgarh. ■

Source: <https://timesofindia.indiatimes.com/city/meerut/in-a-first-300-demoiselle-cranes-flock-to-ganga-barrage-in-bijnor/articleshowprint/62977130.cms>

Pelican festival at Atapaka off to a flying start

The Pelican festival, jointly organised by the Andhra Pradesh Tourism Authority (APTA) and Krishna District Administration at Atapaka Bird Sanctuary took off on a positive note here on Sunday as it received an overwhelming public response. Tourism Minister Bhuma Akhila Priya, along with District Collector B. Lakshmikantham, inaugurated the festival. They

toured the lake and inspected the developmental activities taken up by AP Tourism. “We are happy with the success of the Pelican festival, which is conducted to attract national and international tourists. Atapaka Bird Sanctuary is a famous tourist spot in the district which attracts thousands of birds from Russia, Australia, Africa, and other places travelling thousands of miles,” the Collector said. ■

Source: <https://timesofindia.indiatimes.com/city/vijayawada/districts-pelican-festival-at-atapaka-off-to-a-flying-start/articleshowprint/62781898.cms>

It's official; over 91,000 migratory birds visited Khijadiya this winter

The count of migratory birds done by the forest department in Khijadiya Bird Sanctuary, about 10 km from Jamnagar city, has revealed that 91,261 birds of 193 species visited the Sanctuary this season. The count was done on January 20 and January 21.

During the previous count, in 2012, the bird count was around 40,000, while in last year's census only 27,400 birds of 262 species were found at Khijadiya Bird Sanctuary.

Source:<https://timesofindia.indiatimes.com/city/rajkot/its-official-over-91000-migratory-birds-visited-khijadiya-this-winter/articleshowprint/62639915.cms>

However, forest officials said that the 2017 bird count was not done scientifically. Hence, the count was done this year again. According to an official release by the forest department, species like Black-necked Stork *Ephippiorhynchus asiaticus*, Little Grebe *Tachybaptus ruficollis*, Rosy Pelican *Pelecanus onocrotalus*, Dalmatian Pelican *Pelecanus crispus*, Large Cormorant *Phalacrocorax carbo*, Little Cormorant *Microcarbo niger*, Painted Stork *Mycteria leucocephala*, Flamingos, Common Crane *Grus grus*, Demoiselle Crane *Anthropoides virgo*, Glossy Ibis *Plegadis falcinellus*, etc. visited the Sanctuary between October 2017 and January 2018. The wetland ecosystem of Khijadiya is a wintering ground for migratory waterfowls from Palaearctic region and serves as an important breeding ground for many species of wetland birds, as well as an uncommon breeder in India, the Great Crested Grebe *Podiceps cristatus*. ■

International News

Worrying Alarm Call for World's Birds on brink of Extinction

According to the new data on the world's birds, overfishing and changing sea temperatures are pushing seabirds to the brink of extinction. Birds that are now globally threatened include the Kittiwake and the Atlantic Puffin *Fratercula arctica*, which breed on UK sea cliffs. Meanwhile, on land, the Snowy Owl *Bubo scandiacus* is struggling to find prey as ice melts in the North American Arctic, say conservation groups. The iconic bird is listed as vulnerable to extinction for the first time. "Birds are well-studied and great indicators of the health of the wider environment," said Dr Ian Burfield, Global Science Coordinator at BirdLife International, the IUCN Red List authority on birds. He added that success in Kiwi and Pelican conservation had shown that when well-resourced and supported conservation efforts do pay off. Worldwide, over a quarter of more than 200 bird species reassessed by the International Union for the Conservation of Nature have been moved to higher threat categories, while a similar number have been downgraded.

Fishing pressures

Seabirds are of particular concern, including Cape Gannets *Morus capensis*, which are now classified as

Endangered, and the Antipodean Albatross *Diomedea antipodensis*, which risks being drowned by fishing lines. Fishing pressures and ocean changes caused by climate change are reducing food supply for the chicks of seabirds, while adults receive little protection when they fly over areas of the "high seas" that do not fall under the jurisdiction of any country, says BirdLife International.

The Kittiwake (*Rissa tridactyla* or Black-legged Kittiwake), which breeds along northern coasts, has declined globally by about 40% since the 1970s. More than 70% of the British breeding Kittiwake population is found in Scotland. However, there has been a dramatic decline, particularly in Orkney and Shetland, and on St Kilda in the Western Isles.

"Some efforts are underway to protect important seabird foraging areas in international waters, but there is much more we could do around the UK to protect our internationally important and increasingly threatened seabird populations," said Laura Bambini, the RSPB Scotland's seabird Recovery Officer.

Sandeels are a vital food source for breeding seabirds in the North Sea. The eels are threatened by rising sea

temperatures and are also harvested by commercial fisheries. “We need to ensure that the future management of the sandeel fishery is sustainable,” said Dr Euan Dunn, the RSPB’s Marine Policy Specialist.

The other birds found in the UK to be placed on the IUCN Red List are:

- Atlantic Puffin *Fratercula arctica*
- European Turtle Dove *Streptopelia turtur*
- Pochard
- Slavonian Grebe *Podiceps auritus*
- Balearic Shearwater *Puffinus mauretanicus*
- Long-tailed Duck *Clangula hyemalis*
- Velvet Scoter *Melanitta fusca*
- Aquatic Warbler *Acrocephalus paludicola*

Flagship species

Elsewhere, the Snowy Owl has moved up the rankings from Least Concern to Vulnerable. The North American population has declined by 64% since 1970, as changing temperatures affect its habitat and prey. “Arctic biodiversity is under pressure from a number of stressors, including climate change, so hopefully the uplisting of the Snowy Owl as a flagship species will also draw attention to wider issues in this region,” said Dr. Burfield. In Asia, the Yellow-breasted Bunting *Emberiza aureola*, which is illegally trapped for food, has been uplisted from Endangered to Critically Endangered. While two species of Kiwi in New Zealand are now less threatened, the Kea is declining, in part due to tourists feeding the parrots with junk food like bread and chips. ■

Source: <https://www.bbc.com/news/science-environment-42314289>

Study sheds light on little-known migration habits of the Atlantic Puffin

The winter travel habits of the Atlantic Puffin *Fratercula arctica* have been known little. The stout black and white seabird is known for its grace in the water and clumsy movements on land and air. A new study released on Thursday by a team of international researchers is shedding light on where these birds travel in winter, and how their destination may affect their ultimate survival. Tony Diamond, a University of New Brunswick Ecologist, who collaborated on the study with the University of Oxford, tracked puffins from the colony at Machias Seal Island on the Maine-New Brunswick border using tags the size of a thumbnail affixed to their legs. The data tracked how far the puffins travelled, calculated the energy they expended and determined whether they mixed with other colonies.

Diamond’s findings revealed that the population he monitored travelled to wintering grounds in Southern Labrador and the St. Lawrence Estuary, and that the short distance may explain why the population is in better shape than its endangered European relatives. “The big surprise out of this study was relating the breeding success of colonies to their migration,” he said of the paper, published in Current Biology. “Those wintering closest to the breeding colony do better. They’re not going

as far and they’re using less energy.” Diamond said the research looked at the species’ movement across its range over eight years, combining data from various colonies to create a more accurate picture of the migration patterns of the birds that weigh about 450 grams and use their small wings to chase food underwater. He found that puffins from larger colonies where local winter conditions were poorer migrated further. The wintering hotspots were south of Ireland, south of Iceland, and at the entrance of the Labrador Sea, with the average distance from the colony ranging from 250 km to 1,700 km. Diamond said there are several factors that could explain why puffins from certain colonies may have more breeding success, including the competition for food, how much energy they have to expend foraging for nutrients and the size of their population.

“Gaining new insights into their movements and behaviour in the winters is vital to understand the survivability of puffins,” he said. “If they come back to their summertime breeding grounds having had a tough winter, they are much less likely to breed successfully.” He said the findings could be instrumental in helping conserve the birds through increased awareness of their habitats and marine protected areas. ■

Source: <https://www.thetelegram.com/news/regional/study-sheds-light-on-little-known-migration-habits-of-iconic-atlantic-puffin-166294/>

KILLING FOR LIVING

Text and photographs: Rahul Chakraborty



Two Cinereous Vultures guarding their feeding ground

On December 14, 2017, we set out on a bird photography trip to Bikaner and Tal Chappar in Rajasthan. It was a three-day birding trip with our driver-cum-guide Goutamji.

Bikaner and Tal Chappar are two birding places in India that hold abundant species, especially raptors. Some of the prominent raptor species found here are Steppe Eagle *Aquila nipalensis*, Eastern Imperial Eagle *Aquila heliaca*, Bonelli's Eagle *Aquila fasciata*, Cinereous Vulture *Aegypius monachus*, Egyptian Vulture *Neophron percnopterus*, Red-headed Vulture *Sarcogyps calvus* and Griffon Vulture *Gyps fulvus*. One can spot Saker Falcon *Falco cherrug*, Yellow-eyed Pigeon *Columba eversmanni*, scrubland species like Desert Wheatear *Oenanthe deserti*, shrikes, bulbuls, etc. Located in the state of Rajasthan, these places are not as well known as they should be.

The highlight of our visit was the Black-winged Kite *Elanus caeruleus*. It was the last day of our stay and we decided to go to the outskirts of Bikaner. Located in the western part

of India, the sun rises late in this region. Coupled with that, on the day of our visit was the fog which extended our outing with birds until almost midday.



Dead meat on a feeding ground attracting scavengers



Black-winged Kite with a fresh kill

We were heading back for lunch when Gautamji observed a Black-winged Kite sitting on the ground not very far away. It had a kill under its feet, which immediately caught our interest in this rather common raptor and stopped us in the tracks. It was an Indian Desert Jird *Meriones hurrianae*.

Geared with the necessary gadgets, we took our positions to catch

the unfolding drama. It was an excruciatingly slow and silent killing, one I had never witnessed before in that degree of slowness in my numerous encounters with wildlife. The Jird generally makes multiple holes (bores) to ensure its safety but the one before us that day had clearly failed to evade the eagle eyes of the Black-winged Kite. When we found it, it was already in the firm hold of the Kite, with little

room for escape. With wings flanked around the kill and talons firmly on the kill, the Black-winged Kite struck a menacing pose.

The killing was a slow process. Starting with the Jird's neck, the Kite laboriously plucked all the hair from the little animal with professional skill.

Then, mustering all its strength, it squeezed the head slowly and silently.



Black-winged Kite trying hard to tear apart the kill with its sharp and powerful talons and beak



Tearing apart the prey's head the Black-winged Kite tries to devour it whole

It exerted pressure with its legs and tried to sever the head from the body with amazing grace.

It was a breathtaking scene. The head now apart, the Kite tried to swallow it whole but failed several times. The scene continued another ten minutes. And while the bird was busy focussing on its meal, we quickly captured the moment on our screens, adhering to our guide's warning not to get out of the vehicle, lest we disturb the bird. But it looked like the bird had realised that it needed a quieter place to enjoy its meal. With the Jird's head stuffed in its beak and the rest of the prey tightly gripped to its body with the help of one leg, the bird soared to the skies, flying towards a tree close by. Perching on a branch, it continued to savour its kill in peace. It was time for us to move on.

We headed back to our destination, satisfied with our priced catch for the day. Not only had we sighted a bird-of-prey but we had also come away with an experience that was to live with us for a very long time. ■



Flying away with the half-eaten kill

Shrikes: Avid Gluttons

Text and photographs:

Raghvendra Vanjari, Azim Premji University, Bengaluru

Rahul Vanjari, Sangameshwar College, Solapur

Shivanand Hiremath, Shri. Siddheshwar High School, Solapur

Laniidae is one of the unique families of the bird world. It entails shrikes – birds with specially adapted wings to grab prey in no time, hooked beak and sharp claws. These myna-sized birds are distributed all over the globe. Collectively, this family of true shrikes consists of thirty one species in three different genera, of which eleven occur in India (Lefranc & Worfolk 2013, Praveen et al. 2016).

Maharashtra itself has five species of shrikes (see Table. 1). In Marathi, they are called *khatik* and *gandhari*. *Khatik* means butcher, a term attributed to shrikes as they hang their prey from branches, which resembles flesh hanging at a butcher's shop. They are also called *gandhari*, after the Mahabharata character, going by their black eye mask. These two distinct features set the species apart from other avian species. The mask varies from species to species. But all the species uniformly have sharp eyesight that can trace the slightest movement of a prey.

Some shrike species are found in open dry areas.

Table 1: Shrike species in Maharashtra (Prasad 2003)

Sr. no	English Name	Scientific name
1	Isabelline Shrike	<i>Lanius isabellinus</i>
2	Brown Shrike	<i>Lanius cristatus</i>
3	Bay-backed Shrike	<i>Lanius vittatus</i>
4	Long-tailed Shrike	<i>Lanius schach</i>
5	Great Grey Shrike	<i>Lanius excubitor</i>

Some live in areas with a good number of bushes, and are found nesting in the vicinity. Shrikes are meat-eaters, and different species are known to have varied food preferences (see Table 2). During the breeding season, in what is established as 'courtship feeding', the male offers the prey as gift to the female.

In the drought prone area of Solapur, five species of shrikes have been recorded so far. Most of them are found in open grassland and shrubs. They are often seen alone, rarely in pairs.



Southern Grey Shrike (1) and Long-tailed Shrike (2, 3) on their morning hunt



Bay-backed Shrike and its juvenile clicked as they search for food



A frog hung on a bark



The remains of a consumed egg shell of a Little Brown Dove lies pierced on a branch



Rare photographs of shrike hunting worm snake, which is double its size



A Great Grey Shrike kills and hangs a skink on a tree



Shrike hanging a Munia on an Acacia tree



Grey Shrike capturing an Indian courser chick



The body and head of the Courser chick separated and hung by the Great Grey Shrike



Table 2: Shrike species with food preferences observed in Solapur vicinity

Shrike species	Food					
	Insects	Amphibians	Reptiles	Birds	Mammals	Other
Brown Shrike				Spotted Munia		
Great Grey Shrike	Butterflies, moths, Praying Mantis, Grasshopper	Frog	Worm Snake, Lizard, Skink	Chick of Indian Courser	Rat, Bandicoot	Egg yolk of Little Brown Dove
Bay-backed Shrike	Grasshopper					
Long-tailed Shrike	Beetles, Insect Larvae		Skink			

Our sightings in the region were mostly from the southern tropical thorny forests around Solapur, which consisted of thorny trees and shrubs like Babul *Vachellia nilotica*, Hivar *Vachellia leucophloea*, Khair *Senegalia catechu*, Bor *Ziziphus jujuba*, etc., where the larvae of beetles and butterflies are found abundantly. Availability of locusts, moths and grasshoppers from the nearby fields of Jowar, Millet, and Gram are added attraction. Shrikes are efficient hunters and are known to also prey on rats, small snakes, lizards, and even small birds.

We found them in great numbers at the Great Indian Bustard Sanctuary, scrublands of Kumbhari- Mulegaon, as well as famous birdwatching sites like Hiraj and Hipparga lakes. Few observations from Kumbhari village, with a good number of ground-nesting birds, have revealed the abundance of shrikes in the area. Chicks of larks *Mirafras* sp., Yellow-wattled Lapwing *Vanellus malabaricus*, and Indian Courser *Cursorius coromandelicus* are easy prey for a shrike.

We had an opportunity to witness the unique behaviour of a Great Grey Shrike *Lanius excubitor*. It was on a hunt, and a small Indian Courser chick drew its attention. A moment's distance from the parents was enough for the Shrike to prey on the chick. Before the parents could realise, the Shrike flew away with its victim, speared it on the spikes of Babul and tore away chunks of flesh from the head. The bird is known to keep food reserved for later. It eats parts of its prey and impales the rest on thorns for the next meal. This behaviour could be the key to its survival in the harsh habitats that it inhabits.

Once during birding in the open fields of Hiraj, a pair of Great Grey Shrike caught our attention. The pair was on the ground; one had caught a snake and the other was trying to steal it. The snake was still alive when we saw it. The Shrike had damaged its head badly, and soon the snake was dead. The owner of the hunt took the kill to the Babul tree and hung it on one of the thorns before settling down to enjoy the meal. The other unlucky bird flew away into the bushes. ■

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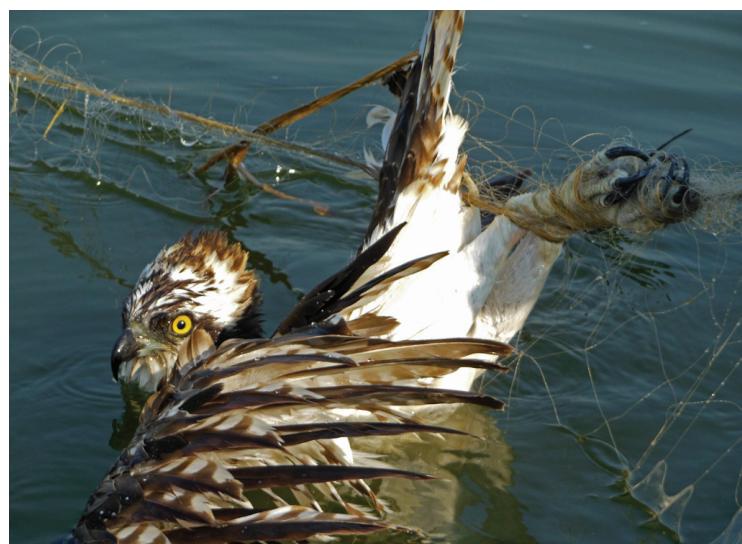


LIFE OF AN OSPREY

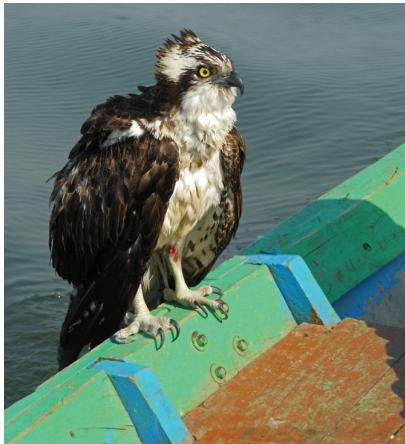
Text and photographs: Daksha Bapat

It was January 31, 2018, the day of the Lunar Eclipse. We arrived at Kumbhargao in Bhigwan, one of the birding destinations of Maharashtra. The village rests on the backwaters of Ujani dam. We had fixed the day's itinerary with Sandip Nagare, the local guide. As scheduled, we set off birding in a boat at about 7:30 a.m. Sandip had assigned Ganesh to be our boatman.

The bird activity in and around the backwaters was lower than usual. It was also a very foggy day and we could not help but feel disappointed. On any other day, Bhigwan is a birders paradise, always blessing its visitors with beautiful sightings of Greater Flamingo *Phoenicopterus roseus*, Bar-headed Goose *Anser indicus*, different species of ducks, storks, and so on. But



Osprey entangled in net



this time, it was different. Instead of ruing over our misfortune, we decided to check another area close by called Diksal. As our boat floated slowly on the water, Ganesh saw a bird in the middle of the water. We were still far away from the bird and assumed it was a duck. To our surprise, it was a raptor – Osprey *Pandion haliaetus* – also known as Masemar in Marathi. When we reached closer, it was



Osprey after being freed from net

apparent that something was not quite right with the bird. It had been caught in a fishing net.

Its legs were entangled in the net, probably made worse from struggling to break free. The fishing nets are made from nylon, which makes it difficult even for a raptor to cut itself free. Fortunately, the bird had managed to keep its head up in the water. We had no idea how long it had been in that state. At least we had reached in time to save it.

We managed to scoop the bird from the cold water. Ganesh had a cutter on the boat. Before settling down to the task, my father ensured the bird was warm and relaxed. The Osprey seemed to sense that it was safe. It remained still on my father's lap, without struggling. My father held it steady as Ganesh used the cutter to break it free.

With the last of the cords snapping under the cutter, the Osprey was finally free to fly away. But it was visibly tired and we also noticed a small cut on its right leg. We rowed back to the shore with the Osprey. A few minutes later, the bird spread its majestic wings and took to the sky.

What an amazing feeling it was to see the Osprey back in the sky. We were glad we had decided to check out the Diksal area. It had given us one of the most unforgettable wildlife moments. Large-scale fishing occurs in the Diksal area, which surely takes its toll on the bird life there. But that fortunate day, we had been in time to save the Osprey and see it so up close.

We recalled the Marathi saying, 'Dev Tari Tyala Kon Mari', meaning 'when God decides to save a life, nobody can harm it'. ■



Dust bathing by Birds

Text and photographs: Ajit Hota

Dust bathing by Malabar Grey Hornbill

It was a hot April afternoon with the temperature soaring at 39 degrees. I was documenting the hornbills of Dandeli forest when I noticed a flock of Malabar Pied Hornbills *Anthracoceros coronatus* flying away from Ficus trees, some with figs tucked in their beaks. They seemed to be flying randomly to different trees. It took me a while to see they were moving in a pattern, traversing from one tree to another. Curious, I followed them hoping to know more. In less than 30 minutes, there were more than 20 Malabar Pied Hornbills in two trees. As I watched, they swooped down to the ground to a specific spot next to the tree, which was an abandoned strip of mud road. One after the other they started ruffling their feathers in the mud, raising a cloud of dust. They were dust bathing!

Dust bath, also known as dusting or sand bathing, is one of the ways

in which birds preen and maintain their plumage. It helps them to get rid of the parasites in their feathers and skin. It was the very first time that I had seen such a large group of Malabar Pied Hornbills dust bathing together. I had seen different bird species dust bathing before, but they have been single individuals or a group of two or three birds.

Why do birds dust bathe?

One of the most vital body parts of a bird are its feathers. Among other things, feathers insulate the skin, waterproof it and provide the power required for a good flight, which is crucial for a bird to go about its daily activities and for survival. Hence, the birds need to ensure their feathers are in top condition through regular preening. One way to fight parasites like lice and feather mites, and ensure the feathers remain smooth

is by bathing in dust. When the dust particles enter its feathers, they soak up the excess oil, thus helping to keep the feathers non-greasy. The excess dust is shaken off at the end of the dust bath along with dry skin and other debris, if any.

In hotter seasons when water may be scarce and in arid habitats, birds such as sparrows, thrushes and hornbills resort to dust baths regularly. Whenever the urge to groom takes over, all it needs is a patch of dust or dry dirt. It is important that the patch is free from predators and other disturbances. I have noticed the urge for a dust bath also varies from season to season, the time of the day and the quality of the dust patch. Hornbills, I have noticed, prefer a combination of loose soil and dust. At Dandeli, they smartly chose a less used road strip, with no likely human interference and predators.



Dust bathing by Malabar Pied Hornbills

How Birds Dust Bathe

In the case of both Malabar Pied and Malabar Grey Hornbills *Ocyceros griseus*, the birds flew to the ground one after the other for dust bath. Sometimes they crawled or took short jumps to find the best spot in the patch; once they were happy with the place, they started scraping their feet, crumbling the soil to create a depression to lower their breast to the ground. They wriggled their bodies vigorously and continued to scratch the ground with their legs to disperse

the soil particles. In the process, they also spread their wings, creating some beautiful wing patterns as you can see from the photos of both Malabar Pied Hornbill and Malabar Grey Hornbill. They flapped their wings continuously and sometimes rolled sideways as well.

As they scraped the ground, the loose soil dispersed into the air and into their feathers and the skin. As seen in the photos, the feathers puffed up and the tail spread out, allowing the dust to reach the skin easily. I also captured them rubbing their head to the ground

to allow the dust to reach the shorter feathers on the cheeks.

After spending some time rolling and rubbing on the ground, the birds paused, looking around for possible threats, and went right back to their ablutions.

When they are through with the dust bath, the birds normally fly to a nearby perch. I have noticed mating Hornbill couples perch together. Once in the safety of a tree perch, the birds shake off the excess dust, followed by an extended preening session. ■

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You can send your feedback pertaining to our website and BUCEROS newsletter via email or through our website. Any queries related to avian ecology can also be sent to bnhs@envis.nic.in or envis@bnhs.org.

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Hornbill House,
Shaheed Bhagat Singh Road,
Mumbai 400 001. India.
Email: membership@bnhs.org
Tel: (91-22) 2282 1811

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Address for correspondence

Project Coordinator	Tel: (91-22) 22821811
ENVIS Centre,	Fax: (91-22) 22837615
Bombay Natural History Society,	Email: bnhs@envis.nic.in ,
Hornbill House, Shaheed Bhagat Singh Road,	envis@bnhs.org
Mumbai 400 001. India.	Website: www.bnhsenvis.nic.in

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